



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,610	03/26/2001	Joergen Brosow	LZ-44PCT	1618

7590 11/05/2002

Friedrich Kueffner  
317 MADISON AVENUE  
SUITE 910  
New York, NY 10017

EXAMINER

TAYLOR, LARRY D

ART UNIT PAPER NUMBER

2876

DATE MAILED: 11/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/744,610

Applicant(s)

BROSOW, JOERGEN

Examiner

Larry D Taylor

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Examiner's Note To Applicant*

1. The Examiner wishes to point out to the applicant that, while the application currently states 30 claims within the specification, the Office recognizes that only 21 claims have been paid for and are identified in the preliminary amendment. Thus, claims 1-21 will be considered in this Office Action.

### *Receipt of Preliminary Amendment*

2. Receipt is acknowledged of the pre-amendment filed 26 March 2001.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 19 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. More specifically, Claim 19 recites that the conductor strips of the safety paper "are penetrated by perforations". However, this limitation is not found as described within the specification or drawings. The Office would need clarification as to what perforations are

Art Unit: 2876

defined as, where these perforations of found on the conductor strips, and suitable evidence of such a limitation within the specification and drawing(s).

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 6, 7, 10, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 6 recites the limitation "the energy transmission" in line 2. There is insufficient antecedent basis for this limitation in the claim.

6. - Claim 7 recites the limitation "the paper layer" in line 3. There is insufficient antecedent basis for this limitation in the claim.

7. Claims 10 and 11 recite the limitation "the pattern" in line 2 of each claim. There is insufficient antecedent basis for this limitation in the claim.

8. Additional suggested corrections by Examiner:

Claim 3, line 3: Delete "the" before the word "information".

Claim 12, line 2: Delete "the" before the words "two conductor strips".

Claim 12, line 4: Delete the last occurrence of "the".

Claim 15, line 5: Delete "the" before the word "electrical".

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

10. Claims 1-4, 6-14, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Baldi (EP 905657 A).

Baldi teaches a safety paper (currency note) with a structure making possible a contactless checking of an authenticity feature, the chip emitting an output signal indicating the presence of the authenticity feature. The structure may be an IC chip with an antenna forming a circuit, the circuit possibly comprising a read-only storage set or a read/write storage set with binary representation (see col. 6, paragraph 46 – col. 7, paragraph 53). The structure may be formed within the paper layer (figure 4 shows the structure within paper layers L1 and L2) or external to the paper layer (figure 6 shows the structure external to paper layers L1 and L2). Figure 1 shows that the structure with a pattern in the shape of a dipole antenna. The dipole antenna would be comprised of two strips extending along a common straight line, which at their facing ends are contacted with connecting areas T1 and T2 (see figure 4), the conductor strips C1 formed with an insulating, polymer substrate L3. The chip of the structure would be arranged on the L3 layer. The chip could also have means of volatile and non-volatile memory and security checking, functioning as a micro-controlling circuit.

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2876

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Weinberger (US 4,472,627, as cited by applicant).

Weinberger teaches a safety paper (currency) with a structure making possible a contactless checking of an authenticity feature, the structure comprises a photovoltaic surface area, whose light reflection and/or transmission properties can be controlled as function of the voltage supplied to the surface. The structure has a solar cell surface area 26 that serves as an energy supply from light applied to the area. The light applied may change the color of the structure surface area (figure 1-4, col. 2, lines 34-64, and col. 3, line 32 – col. 4, line 15).

13. Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Batchelor et al. (GB 2272861 A, as cited by applicant).

Batchelor teaches a safety document 10 with a thermochromic surface area comprising an authenticity feature, whose color properties can be controlled as a function of heat input (see abstract and figure 2).

### *Claim Rejections - 35 USC § 103*

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 5, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldi in view of Weinberger.

The teachings of Baldi and Weinberger have been discussed above. Although Baldi fails to teach the conductor strips of the currency note providing a foil for supporting an energy supplying photovoltaic area, it would have been obvious to provide the photovoltaic area of Weinberger. As evidenced in the art of Weinberger, the use of such an area is more accepted in the industry as an effective method of security and authentication. The currency employing photovoltaic area becomes not readily copied by the likes of a regular copy machine or other reprographic device. The area also affords for automatic energy supplying, as engagement with a thermal device, sunlight, or lamp can activate the authentication process without the use of a costly external device for energy.

Regarding claim 18, it is not specifically taught that the structure pattern is comprised of a material whose expansion coefficient corresponds to the expansion coefficient of the paper layer. However, it would have been obvious to one of ordinary skill in the art to employ such parameters, as it would only make common industrial sense for the pattern and paper layer to have similar expansive properties, so as to prevent the pattern from separating from the paper layer during a heating process. For example, if the currency were in a very hot environment, without similar expansive properties, the paper layer may expand at a faster rate than the pattern, causing the pattern to be damaged or "fall off" the currency.

### *Conclusion*

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See IBM Technical Disclosure, titled Currency With an Integrated Chip, Vol. 32, Issue No. 5A, Page 427, dated October 1, 1989.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larry D Taylor whose telephone number is (703) 306-5867. The examiner can normally be reached on M-F (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G Lee can be reached on (703)-305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-746-4784 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Larry D Taylor  
November 4, 2002



**THIEN M. LE**  
**PRIMARY EXAMINER**